CLAIMS

1. A zoom lens having a first lens group fixed upon zooming and having a positive refractive power, a second lens group having a negative refractive power, a third lens group having a positive refractive power, a fourth lens group having a negative refractive power, and a fifth lens group having a positive refractive power, which are successively arranged in the order from the object side, wherein at least the second lens group and the fourth lens group are moved for zooming, wherein

said first lens group comprises a first single lens having a negative refractive power, a reflective member for bending an optical path through 90°, and at least one second lens having a positive refractive power, which are successively arranged in the order from the object side.

2. The zoom lens according to claim 1, which satisfy the following conditional formulas (1), (2):

(1) $1.0 < D1/Fw < 5.0$; and

(2) $0.1 < D1/Ft < 1.0$

where

D1: the entire lens length of the first lens group;

Fw: the focal length of the entire lens system at a wide-angle end state; and

Ft: the focal length of the entire lens system at a telescopic end state.

3. The zoom lens according to claim 1, which satisfy the following conditional formulas (3), (4):

(3) NdL1 > 1.75; and

(4) VdAv - VdL1 > 15

where

NdL1: the refractive index of the first lens at the d-line;

VdL1: the Abbe number of the first lens at the d-line; and

VdAv the average of the Abbe numbers of the lenses having a positive refractive power subsequent to the second lens in the first lens group (VdAv is determined by (ΣVdLi)/i where i represents the number of lenses having a positive refractive power subsequent to the second lens).

4. The zoom lens according to claim 2, which satisfy the following conditional formulas (3), (4):

(3) NdL1 > 1.75; and

(4) VdAv - VdL1 > 15

where

NdL1: the refractive index of the first lens at the d-line;

VdL1: the Abbe number of the first lens at the d-line;

and

VdAv the average of the Abbe numbers of the lenses having a positive refractive power subsequent to the second lens in the first lens group (VdAv is determined by (ΣVdLi)/i where i represents the number of lenses having a positive refractive power subsequent to the second lens).

5. The zoom lens according to claim 1, wherein the third lens group has an iris aperture and is fixed upon zooming.

6. The zoom lens according to claim 2, wherein the third lens group has an iris aperture and is fixed upon zooming.

7. The zoom lens according to claim 3, wherein the third lens group has an iris aperture and is fixed upon zooming.

8. The zoom lens according to claim 4, wherein the third lens group has an iris aperture and is fixed upon zooming.

9. An image pickup apparatus comprising a zoom lens having a plurality of lens groups, for varying a magnifying power by changing distances between the lens groups, and a image sensing device for converting an optical image generated by said zoom lens into an electric signal, wherein

said zoom lens comprises a first lens group fixed upon zooming and having a positive refractive power, a second lens group having a negative refractive power, a third lens group having a positive refractive power, a fourth lens group having a negative refractive power, and a fifth lens group having a positive refractive power, which are successively arranged in the order from the object side, wherein at least the second lens group and the fourth lens group are moved for zooming, and wherein

said first lens group comprises a first single lens having a negative refractive power, a reflective member for bending an optical path through 90°, and at least one second lens having a positive refractive power, which are successively arranged in the order from the object side.